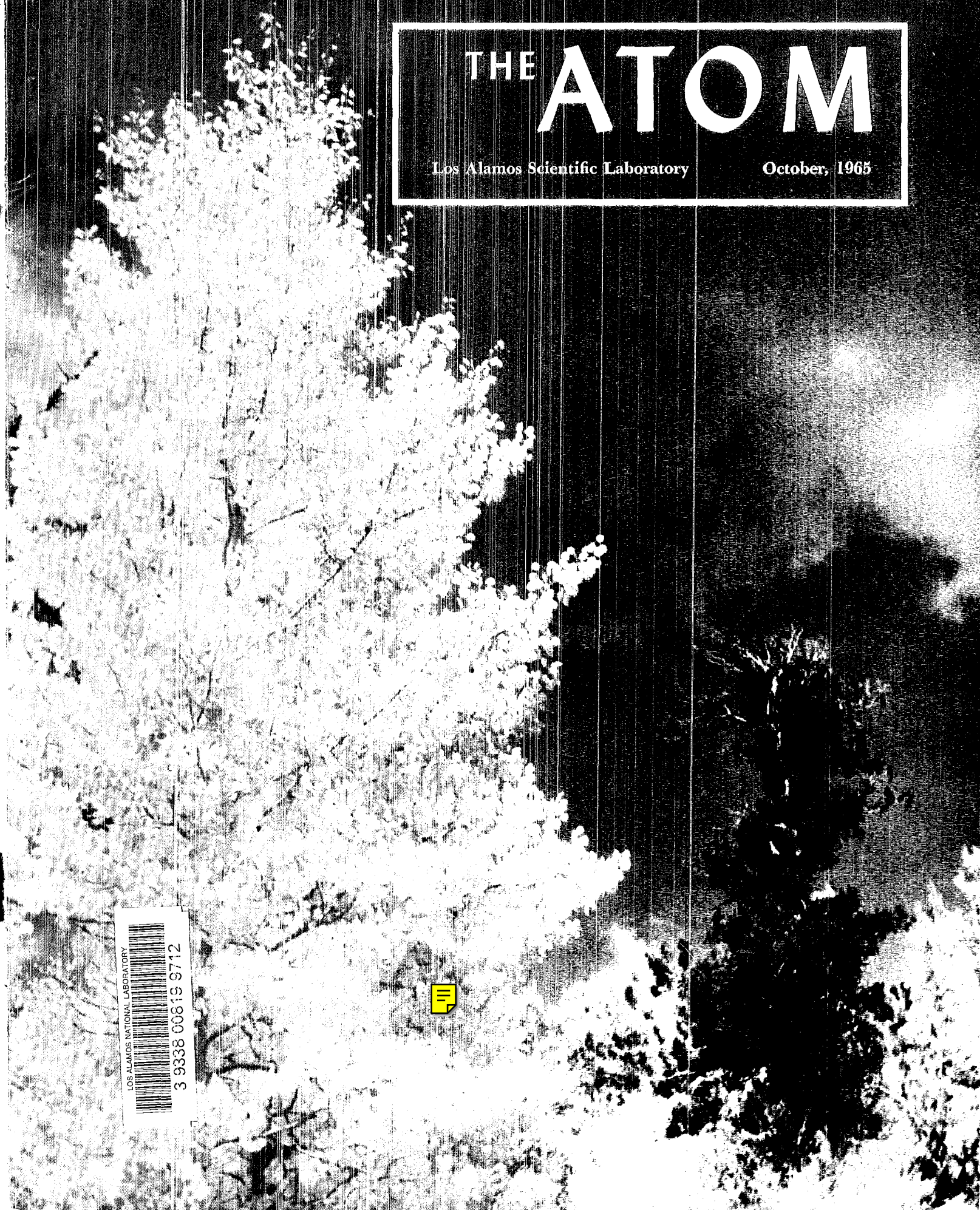

THE ATOM

Los Alamos Scientific Laboratory October, 1965

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ON THE COVER: New Mexico's mountain lands are never more beautiful than in early autumn, when the aureate atmosphere of aspen time is everywhere. Bill Regan's color photo was made high in the Jemez. Other pictures and some aspen information start on page 9.

Los Alamos Scientific Laboratory,
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Short Subjects

Location of the super accelerator proposed for construction by the Atomic Energy Commission is now being studied by the National Academy of Sciences. AEC has asked for an evaluation of 85 of the 126 proposals that were made in response to an AEC announcement earlier this year. Both Santa Fe and Albuquerque are on the active evaluation list. More than 200 sites in a total of 43 states were first suggested for the 200 billion electron volt proton accelerator. The Academy has established a special site committee, headed by Dr. E. R. Piore of New York, to make the evaluations and inspect some of the proposed locations. The accelerator would take about eight years to build and cost an estimated 300 million dollars. AEC said it had been hoped a site decision could be made before the end of 1965 but in view of the great interest in the facility this may not be possible.

Rodney S. Thurston, cryogenist in CMF-9, has won a $200 award for the best paper presented at the 1964 Cryogenic Engineering Conference. The award was made at the August 23 meeting at Rice University in Houston, Texas. The paper, "Probing Experiments on Pressure Oscillations in Two-Phase and Supercritical Hydrogen with Forced Convection Heat Transfer," was written in conjunction with his doctoral dissertation at the University of New Mexico. Thurston, who joined the LASL staff August 17, 1959, holds AB, BS and MS degrees in mechanical engineering from Columbia University, New York City.

George F. Sadlier, 53, an SD-5 machinist since October, 1952, died September 14 after a heart attack. He was stricken while at work. Sadlier resided at Riverside. He was born at Linwood, Utah. Survivors include his wife, Jennie, and daughter Joan 12.

The six LASL "astromonks" are "doing great, they have a clean bill of health" at their quarters in the animal research center at Holloman Air Force Base. That was the report September 20, a month after the conclusion of the 30-day experiment here in which the rhesus monkeys were studied to see if continued exposure to gamma radiation would have a bad effect on their ability to perform certain tasks. Dr. Don Farrer of the Aeromedical Research Laboratory at Holloman and Dr. John Spalding of LASL's radiobiology group conducted the unique experiment, which in some ways was similar to an extended voyage through space. Early results showed the animals' ability to perform was not impaired. They have been under close medical scrutiny ever since, to determine if the radiation had any lingering physical effects. "Apparently not," reported Dr. Farrer.

The Abiquiu Dam Reservoir, which ordinarily stores only flood control water for a few hours, will have a surface area impoundment of some 2,000 acres until the first of November. Army Engineers, who operate the big Chama River check point, are storing water being released upstream from El Vado Dam. Abiquiu will also have some storage throughout the winter and likely will have a lake of at least 900 acres all next summer. This will be water held for Indian irrigation use that normally is retained at El Vado, which is being emptied for outlet structure rebuilding.

Willie D. Jackson, 65, of CMB-AS, a Laboratory service inspector since 1959, retired August 27. Jackson came to Los Alamos from Alma, Ark., where he had been a rancher. A son-in-law, Earl Fullman, works with J-16.

continued on next page

Give Once for Eleven . . .

Community Chest Goal Is $41,600

This is Red Feather Month, that time of the year when all good people are asked to come to the aid of their community.

Goal in this year's Community Chest drive is $41,600. Drive chairman is Jesse Rose, head of the AEC's Municipal Section and former Los Alamos chief of police.

ROSE

Eleven local agencies are participating in the campaign, which will end October 30. Individual agency goals: Red Cross, $4,570; Cancer Clinic, $3,200; Heart Association, $3,500; Retarded Children, $4,000; Salvation Army, $2,800; Girl Scouts, $7,500; Boy Scouts, $7,500; Little League, $1,000; Babe Ruth League, $1,000; Family Council, $5,000. The Lassie League, a Chest agency, is requesting no funds for the upcoming year but is assisting in the drive. Campaign expenses have been budgeted for $1,430.

As in the past, LASL employees may make their Chest contributions through payroll deduction and on the installment plan.

Of the campaign, Lab Director Norris Bradbury has told all employes:

> "Within the next few weeks, volunteer workers will solicit our contributions. How much we give is, of course, a matter of personal concern. We should keep in mind, however, that the annual Community Chest Fund Drive is designed as a substitute for separate campaigns by the eleven participating agencies.
>
> "The Chest is anxious to increase the number of donors within the Laboratory. Installment giving and automatic bank deductions can be arranged.
>
> "The entire Los Alamos community and many other communities and individuals less fortunate than ourselves benefit from our making this a highly successful campaign."

Ten persons have been named by the Community Chest Board of Directors to a new Campaign Advisory Committee. The permanent group, which will meet twice yearly, will review Drive operations and offer recommendations concerning operations and campaign philosophy. Chairman for 1965 is this year's Drive chairman, Jesse Rose.

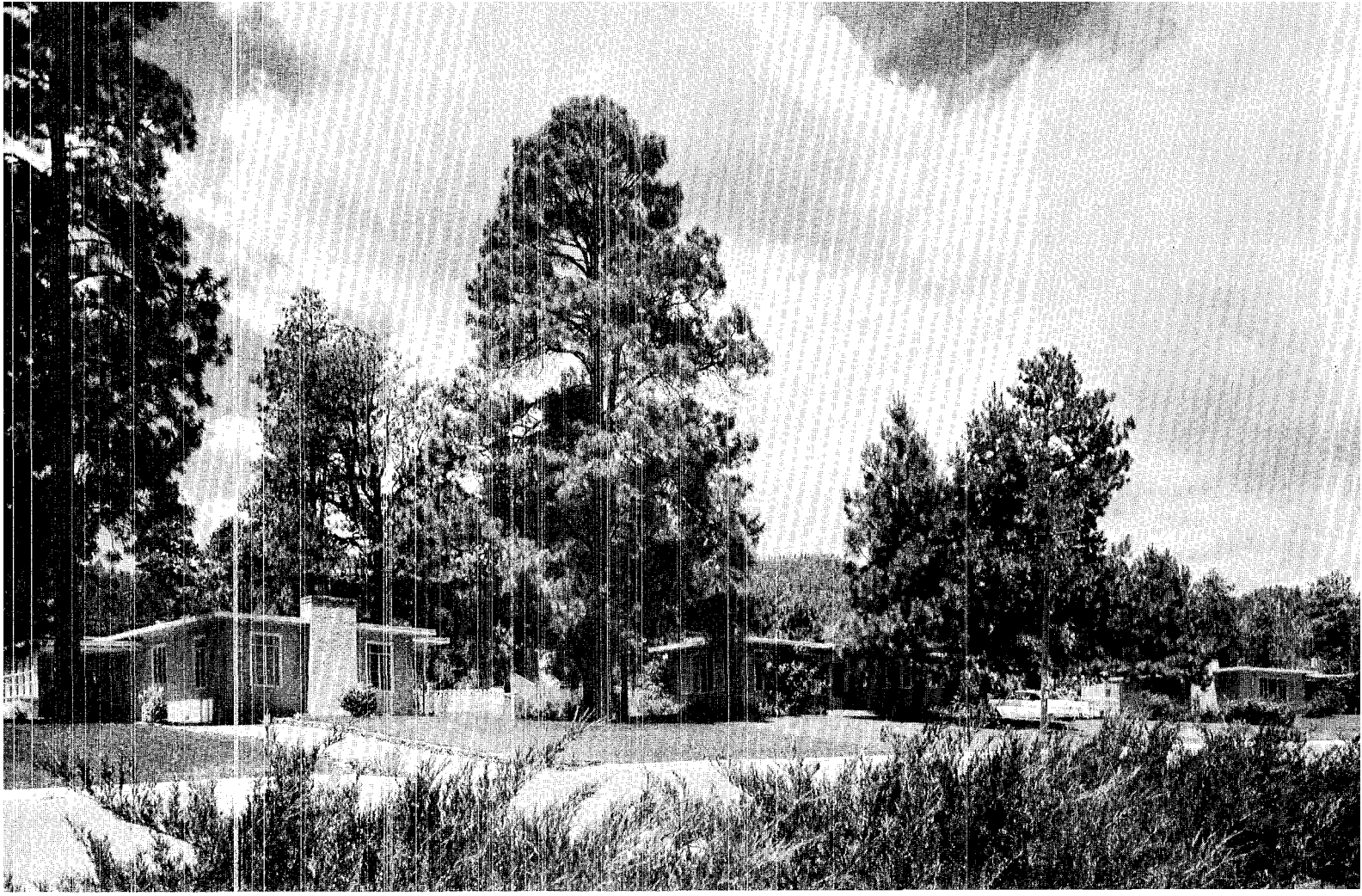
Permanent members of the committee are Dr. Bradbury, Charles C. Campbell, Area Manager for the AEC; Robert B. Hill, Administrator of the Los Alamos Medical Center; Wendell Miller, Manager of the Zia Company; Robert Porton, head of the LASL Community Relations office; C. W. Richard, Los Alamos Superintendent of Schools; John Rogers, Chairman of the Los Alamos County Commission; James Teare, President of the Los Alamos Building and Loan Association; John Helm, Manager of the Los Alamos Branch of the First National Bank of Santa Fe, and William H. Strickfaden, Los Alamos Manager for the Mountain States Telephone and Telegraph Company.

Shorts . . .

Continued from preceding page

Dr. Gerhard Dieke, Chairman of the Physics Department at Johns Hopkins University and a frequent consultant to the Laboratory, died August 25 in Scotland, where he had been spending the summer lecturing. Dr. Dieke was an internationally respected spectroscopist and was well-known among New Mexico scientists. His most recent consultant work here was in 1964, with the atmospheric physics group (J-10).

N. H. Krikorian of CMB-3 spent the last three weeks of September in Europe where he participated in discussions at three British and French nuclear research centers. The first stop was at the Atomic Energy Research Establishment facility at Harwell on September 13. His lectures continued at the Centre d'Etudes Nucleaires, Fontenay-Aux-Roses, and at the Orsay laboratory of the University of Paris. On his return, he was to conduct a seminar at Harpur College, Binghamton, N.Y., on October 3.



These Western Area homes, built not long after the close of World War II, have FHA appraisal values ranging between $10,000 and $15,000. Occupants may buy them for 25 per cent off the appraised value on 25-year mortgages.

It Won't Be Long Now

Posting of FHA Appraisals Brings Home Ownership Closer and Puts Spotlight on Multitude of Details and Decisions that Face Buyers, Sellers and Remodelers

BY EARL ZIMMERMAN

Los Alamos turned an important corner on August 30. Appraisals on 1545 government-owned housing parcels—salable singles and duplexes—were announced on that day by the Housing and Home Finance Agency.

The action was the most significant and eagerly-awaited public step yet taken on the route to private ownership and local autonomy of the residential community. It provided an exciting spur to the

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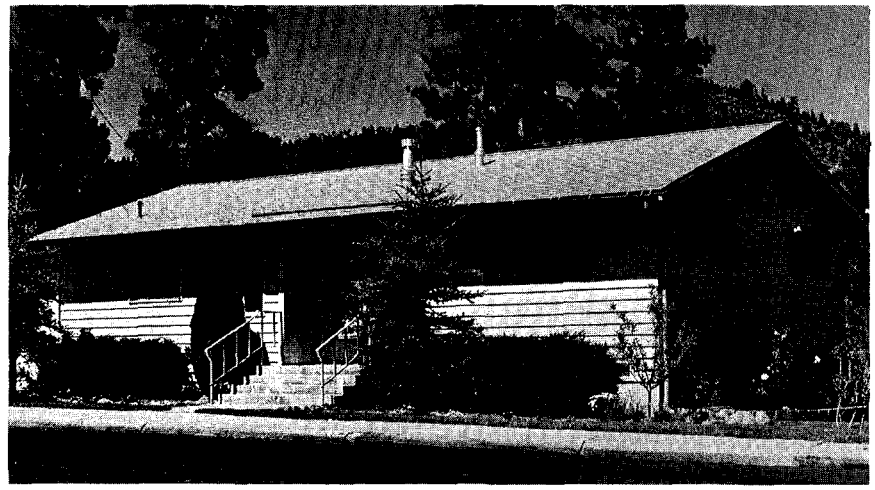

The newer single unit houses in Los Alamos are of this type, in Eastern Area and North Community near the golf course. Appraisal values vary depending on the number of bedrooms and lot size, average about $10,000.

Disposal . . .

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contemplation of private home ownership thousands of residents have entertained with varying degrees of enthusiasm since the word "disposal" was first voiced some 10 years ago.

Generally, residents appeared satisfied with the proposed cost of buying the roof that shelters them. The HHFA figures, based on appraisals made by FHA teams over a two-year period, represent a total "current fair market value" of $16,710,000, including some $355,000 in property improvements that have been made by present tenants.

The property to be sold includes 969 single family houses, 258 "semi-detached" houses (splittable duplex units) and 318 duplexes. Housing types range from Western Area structures built in 1947 to the 18B houses finished in 1958 and 1959.

Other appraisals, on about 40 vacant developable lots, on apartment buildings that will be sold, and on the commercial property, will be announced later.

E. Daryl Mabee, who heads the HHFA Los Alamos field office, and who will be in charge of actual sales procedures, said first sales may come during November. These probably will be for properties in the Eastern Area.

"We hope to be able to then proceed in a sort of clockwise manner," Mabee said, following the Eastern Area sales with the Western Area, then the various portions of North Community and ending with 21 residential properties near the Community Center.

Because of the great need for additional buildings—both residential and commercial—it is possible the developable lots may be offered during the house sale, as soon as appraisals are completed, Mabee said.

Los Alamos residents anticipating the thrills, responsibilities, worries, expenses and assorted other involvements of home ownership reacted to the appraisals announcement with a surge of speculation, dreaming, planning, and not infrequently, scheming.

To most residents, especially old-timers, property ownership is an unfamiliar experience, bringing with it a lexicon of terms quite unlike those encountered in the physics laboratory. Mortgage, lien, easement, discount, closing costs, earnest money, plats, interest rates, taxes, gains, contracts, equity, title, deed, abstract, zoning restrictions, building codes, insurance, market value, escrow accounts, upkeep, utility bills, resale, commissions, and a host of other terms and situations will be largely foreign and require prompt learning.

Both Mabee and officials in the Atomic Energy Commission who are guiding the community toward its rendezvous with normalcy stress that the sale of real estate is going to take time. They are not ready to say just how much time, but anywhere from one to two years seems to be a valid prediction for completion of the residential property sales effort.

One tentative sales schedule that has been studied, Mabee said, would offer single units only in three major subdivisions at approximately three-month intervals. This would be followed by an offering of all non-splittable duplexes and then the splittable duplexes. The separate housing types sales pattern would provide consideration for the special second priority that is afforded junior tenants in unsplittable duplexes. This regulation gives displaced junior tenants first crack at unsold splittable and unsplittable duplexes.

Such a schedule, which Mabee stresses is only tentative "and certainly shouldn't be regarded as more than a possible timetable," could see Eastern Areas 1 and 2 offered about November of this year, the Western Area singles in February, 1966, North Community singles in May, all non-splittable duplexes next August and all splittable duplexes about November of next year.

Assuming that all increments were sold without much delay, the major residential sales program thus

"Mr. Disposal" at Los Alamos is E. Daryl Mabee, Field Director for the Housing and Home Finance Agency's Community Disposal staff. Mabee has been in Los Alamos since the FHA appraisal work began nearly two years ago and is the man residents will be dealing with when they exercise their priority to buy Government housing. A 30-year veteran in the real estate and property management field, Mabee is a former resident of Oregon. He was the Government representative for the first "disposal" real estate sale when the AEC sold its community holdings at Richland, Wash., in 1957. In addition to his assignment at Los Alamos Mabee remains Community Disposition Supervisor at Richland, where the work that remains now "involves only keeping tabs on the mortgages."

could be in the windup stages by the spring of 1967. Mabee said, too, there is the possibility that subdivision sale periods can overlap.

There are two important provisions in the law that must be met before any property is sold. One is the "finding of feasibility of sale," which in essence is a finding by the HHFA that reaction to the appraisals was favorable and there seems to be no reason that sales should not commence and proceed without difficulty. The declaration was expected to be filed by National Housing Administrator Robert Weaver early this month.

The second prerequisite is platting. A plat is a precise description of the exact boundaries of each parcel of property and the various easements and utility lines influencing it and is an absolute necessity for any title transfer. Platting has been progressing in Los Alamos for over two years, by districts. Eastern Areas 1 and 2 and part of Western Area and North Community have been completed. Property sales in a district cannot be made until the particular plat of that subdivision is completed by the AEC, reviewed by the Planning Commission and filed with the County Clerk. Mabee said he is confident platting will be completed without delaying the sales sequence and that sales will proceed as rapidly as applications can be processed and paperwork accomplished.

Once the feasibility has been declared and the necessary plats are on file, what happens next?

A general "offer to sell" the properties in a subdivision will be publicized by HHFA. The AEC will then supply to the HHFA a list of persons who are occupants of the single houses and splittable duplexes. The HHFA will regard this as establishing priority for those people and will mail each of them a specific offer.

Occupants of unsplittable duplexes, however, will need to make formal application for priority to

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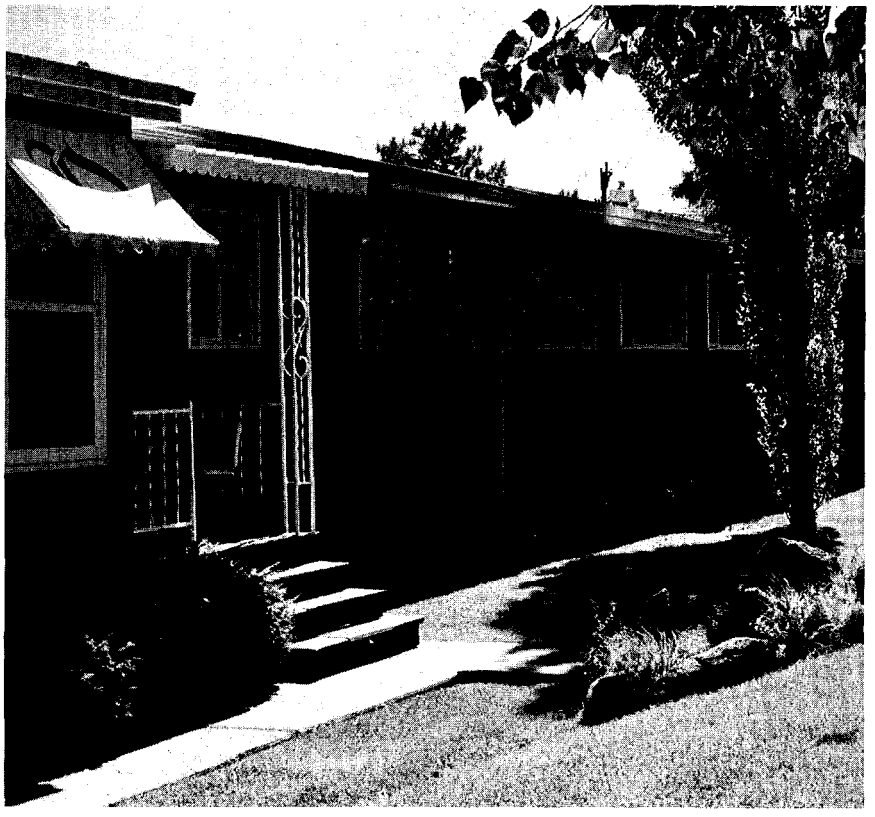


Awning and porch railing have been added to this Group 12 duplex in North Community. Many Group 12's are splittable and will be offered to occupants.

Disposal . . .

continued from preceding page

the AEC. Senior tenants, for example, will have to obtain validation of their first priority. THIS MUST BE DONE WITHIN 30 DAYS OF THE GENERAL OFFERING.

Also during this time, prospective purchasers desiring "enhancement" credit must submit to the AEC, on an AEC form to be supplied, a list of improvements for which they claim credit. AEC will certify the list of improvements the applicant is entitled to claim. FHA will then determine the final value; this will be the tenant improvement credit.

Prospective purchasers will have 93 days from the date of the specific offer to sell to make their declaration of intent to buy. This must be made to the HHFA and be accompanied by $100, earnest money which will be applied against the down payment.

At this point the buyer will have to decide on his financing. First he ponders the appraisal and the two discounts offered by the law. One discount is automatic, 15 per cent off the appraisal to every priority purchaser. Another 10 per cent reduction is available if the buyer signs a waiver to the indemnity features of the law. This provision is for possible Government compensation in case market values sag because of a drop in Government employment and population at Los Alamos before September 28, 1977.

Only one person in the nearly 10,000 who purchased property at Oak Ridge and Richland (it was a Richland buyer) failed to apply for the full 25 per cent purchase discount.

A house buyer may, if he desires and is able, pay cash. The usual method, though, is to apply for a loan and sign a mortgage. The disposal law authorizes HHFA to make direct loans, on FHA terms, to buyers if "reasonable" local financing is not available.

Whether or not direct HHFA financing will be needed, and to what extent, must await the start of sales. Some local lending institutions have indicated a positive interest in participating in the sales program. The amount of money available for loans locally will depend on the pace at which the sales program proceeds and the type of loans, i.e. size of down payment and length of mortgage, that buyers favor.

FHA terms, as applied to the government housing at Los Alamos, will require a 3 per cent down payment with a mortgage bearing 5¼ per cent interest plus ½ of 1 per cent for FHA insurance, or an effective loan rate of 5¾ per cent. This loan, Mabee anticipates, can be granted on as much as a 25-year repayment schedule for most properties.

To illustrate, consider a government house appraised at $12,000. With the 25 per cent discount afforded priority buyers, the house will sell for $9,000. Down payment will be $270, of which $100 can come from the earnest money deposit. The balance can be applied from tenant enhancement credit, if there is any, or must be in cash.

At this money-passing and mortgage-signing point one of the hard facts of real estate purchasing must be faced—closing costs. This item may amount to about 5 per cent of the purchase price and will include such things as a three-year paid-in-advance hazard (fire and extended coverage) insurance policy on the dwelling payable first in the amount of the mortgage balance to the HHFA; a mortgagee title insurance policy to guarantee that

any disputes over the HHFA's legal interest in the mortgage will be defended without cost to the HHFA; property taxes or a tax equivalent for the remaining portion of the tax year. Closing costs must be paid in cash.

Thus, assuming the new owner has no tenant enhancement credit and is buying on the minimum-down-payment plan, the actual cash acquisition cost for the $9,000 purchase price house could total about $720. Enchancement credit can be used to reduce the cost of the house.

There is a condition to obtaining a 3 per cent-down FHA-insured mortgage that is of importance here. To receive the 97 per cent loan a purchaser must warrant that he is buying the property for his own abode. Without such a declaration the loan limit is reduced to 85 per cent of the price, meaning a 15 per cent down payment.

Remember, all potential borrowers must pass a standard credit investigation and meet the other usual qualifications for loans. A priority right to purchase is not an automatic guarantee of getting a loan; if you don't pay your bills you may have difficulty qualifying.

One of the most generous features of the sale program is the opportunity to include a home improvement-type loan in the original long-term mortgage. Home improvement loans under other circumstances are usually for five or seven years.

But like most good deals, the HHFA home improvement loan package comes wrapped rather tightly in strings. Remodeling plans must be architecturally prepared and the work performed by a bonded contractor. Plans must be submitted for approval in advance of the sale closing. The additional loan money will not necessarily be for the whole cost of the remodeling, but will be only for the amount the improvement will actually add to the appraised value of the property. This figure will be reached by the FHA people who evaluate the loan application and plans. And, all construction work will have to be performed under standard FHA conditions, subject to FHA inspection and final approval and acceptance.

Now, how about resale? A number of fascinating complications arise, nearly all of which tend to reduce the prospect of an easy money deal, even if a low-priority but well-heeled prospective buyer is standing on your front stoop with money in his hands when you return from the HHFA office.

For one thing, the HHFA will be out of the act once the initial sale is consummated. But, your initial mortgage is transferable if the new buyer can meet the loan qualifications and if the two of you can agree on the amount to be paid in excess of the mortgage balance.

Buyer No. 2 must be prepared to pay the difference between the mortgage balance and the new selling price in cash, plus a new set of closing costs and, if a real estate broker is handling the details, the legally-established fee of 6 per cent of the total selling price to the broker. Almost without exception this agent's fee comes off the total price received by the seller. If an agent isn't used the fee is saved, but it can be foolhardy to attempt a real estate transaction without some expert assistance. An alternate method is to hire an attorney to supervise things, but only the Legal Aid Society works for free in that profession.

An additional wet blanket is now tossed on this quick-turnover operation. If Buyer No. 1 sells his newly-acquired home and hearth before he has lived in it (or had title to it), for six months, a sizable portion of his profit may be up for grabs by the Internal Revenue Service. If he has actually held the house for the qualifying time he may gain some tax benefit by writing his profit down as a long-term gain. In any case the profit is probably going to be pared somewhat by the tax agents. Reinvesting in real estate that costs more than the property sold is one way to save the tax bite, but that method may not work if you can't prove you didn't buy and sell solely for the profit to be realized.

Backing up, suppose Buyer No. 2 doesn't have the cash for a down payment to meet the markup of Buyer No. 1. He can then try for an entirely new mortgage. But, this time he will have to find a lender himself, since the HHFA route is not open to him. Assuming a lending institution is interested, it has the option of loaning on FHA terms. But that is not an automatic condition. Most private housing in Los Alamos, in fact, has been financed on "conventional" loans, which bear interest ranging up to 7 per cent and require down payments of at least 10 per cent.

Often, bank-financed FHA loans

continued on next page

NEW REGULATIONS

Three new housing regulations, designed "in the interest of fairness and the optimum utilization of Government housing" were put in force September 20 by the Laboratory, the Atomic Energy Commission and the Zia Company.

They provide:

—Employes at Los Alamos not presently assigned to Government-owned housing will not be eligible for any future assignment to either a duplex or single unit which will be offered for sale.

—Once an individual exercises a priority to purchase Government-owned housing at Los Alamos, neither he nor his spouse will be eligible for a future assignment to any type of Government-owned housing.

—LASL employes who move from a Government housing unit to Barranca Mesa, White Rock or other private housing will be required to terminate their Government housing leases within one week.

Disposal . . .

continued from preceding page

will include a "discount," a financial procedure which amounts to a long-term fee to the bank for getting the loan for you in the first place. This is not unusual; money costs money just like everything else and bankers have to go some place to buy theirs. Too, even though the bank goes along on the financing, it may require a fresh appraisal (which you will pay for in the closing costs). If the bank's appraisers agree with the value the FHA put on the place, fine. But they may determine the house has a loan value perhaps higher or perhaps lower than the HHFA figure. Regardless, Buyer No. 2 will have to find a lender and make his own arrangements.

Meanwhile, what of the unsplittable duplexes and the junior tenant who suddenly finds himself paying rent to his next door neighbor instead of Zia? Congress didn't forget the junior tenant, although the concern has a time limit.

In effect, the clock starts running for a junior tenant when the general offer of sale is made. The law provides that the junior tenant may remain in his quarters for 12 months from that date, assured of no rent increase. The senior tenant-landlord is assured that any major maintenance required because of adverse actions by his renter will be taken care of by the Government (and the junior tenant offending will get a bill from Uncle Sam in all likelihood).

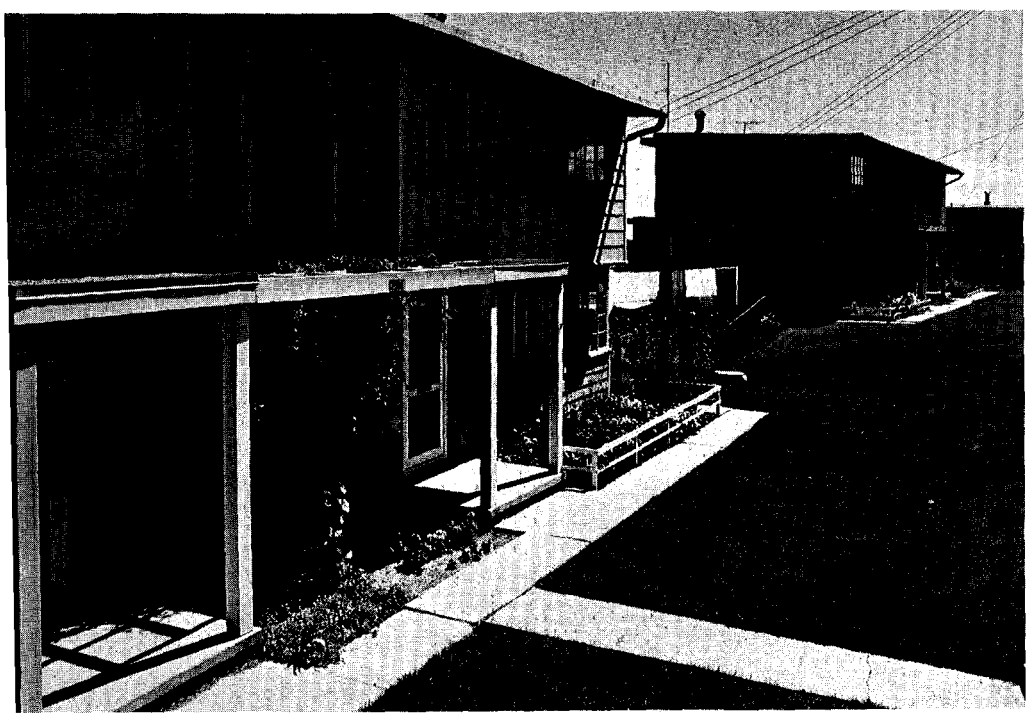
When the 12-month period ends the junior tenant is on his own. If his landlord decrees it, he must leave. The rent can be raised, or lowered. In sum, the landlord-tenant relationship is then no different than in Philadelphia or Albuquerque.

The prospect remains, of course, that a junior tenant may acquire active purchaser status. This could happen quite early, like if the senior tenant decides not to buy his building. As the sales program proceeds, if buildings go unsold, junior tenants and all others with varying degrees of priority may have a crack at being a buyer. In the event there are more buyers than there are houses, the first determination within priority categories will be settled by seniority, and finally by drawing of lots.

Now, suppose you've made your deal, with either HHFA, a bank, building and loan association, credit union, or by some other arrangements have become a homeowner. Looking around, you decide to get started on making some changes. Do-it-yourself is fun and on some occasions has even been known to save money. But just because you will be lord and master of your home, you will have no more license than now for unlimited remodeling. County zoning laws and building restrictions will be in force. Installing that second bath will require the services of a licensed plumber; additional rooms will remain dark unless an authorized electrician puts in the wiring or it meets the standards and passes inspection of appropriate local government departments, and don't plan a garage without making sure it will fit on the lot without violating setback and easement rules.

One more thing: The joys of private ownership entail, in Los Alamos, a somewhat different schedule of rates for some utilities and services. Water, for instance, may cost the new homeowners about the same as residents in White Rock and Barranca Mesa now pay, which is more. Refuse removal and sewer use fees may be higher. As Barranca Mesa and White Rock home-owning pioneers can testify, the operation of a household changes considerably when Zia maintenance services are no longer available.

So be it. Normalcy, here we come!



The famed Group 11 duplex, most common multiple unit in the salable housing parcels. With the discount, these will cost about $10,000 for the entire building.

FOREST SHOWOFF

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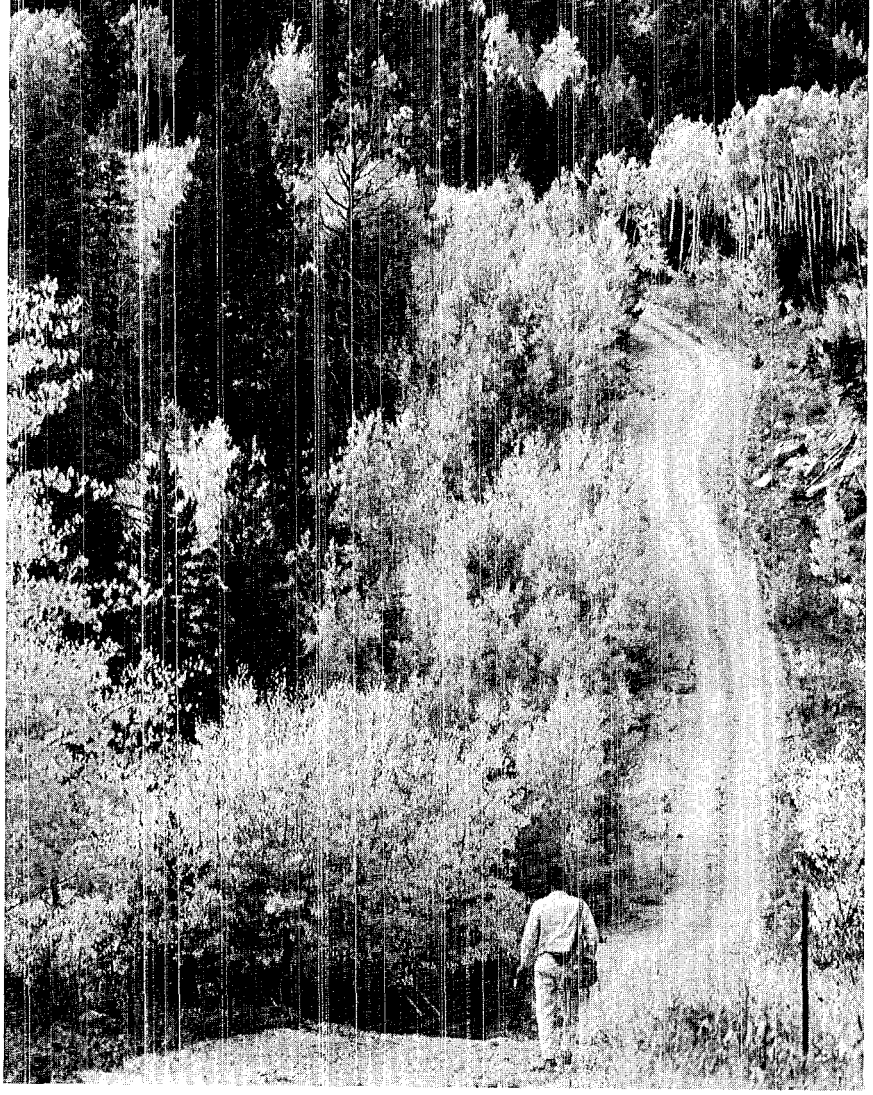


A walk in the woods is never more beautiful than during the aspen season. This road (left) is in the Jemez, not far from the ski run. Like gold dollars, fallen leaves (above) carpet a forest trail, soft beneath the hiker's boot.

Not a great many years ago American lumberjacks refused to sleep in a camp cabin that was made of aspen logs.

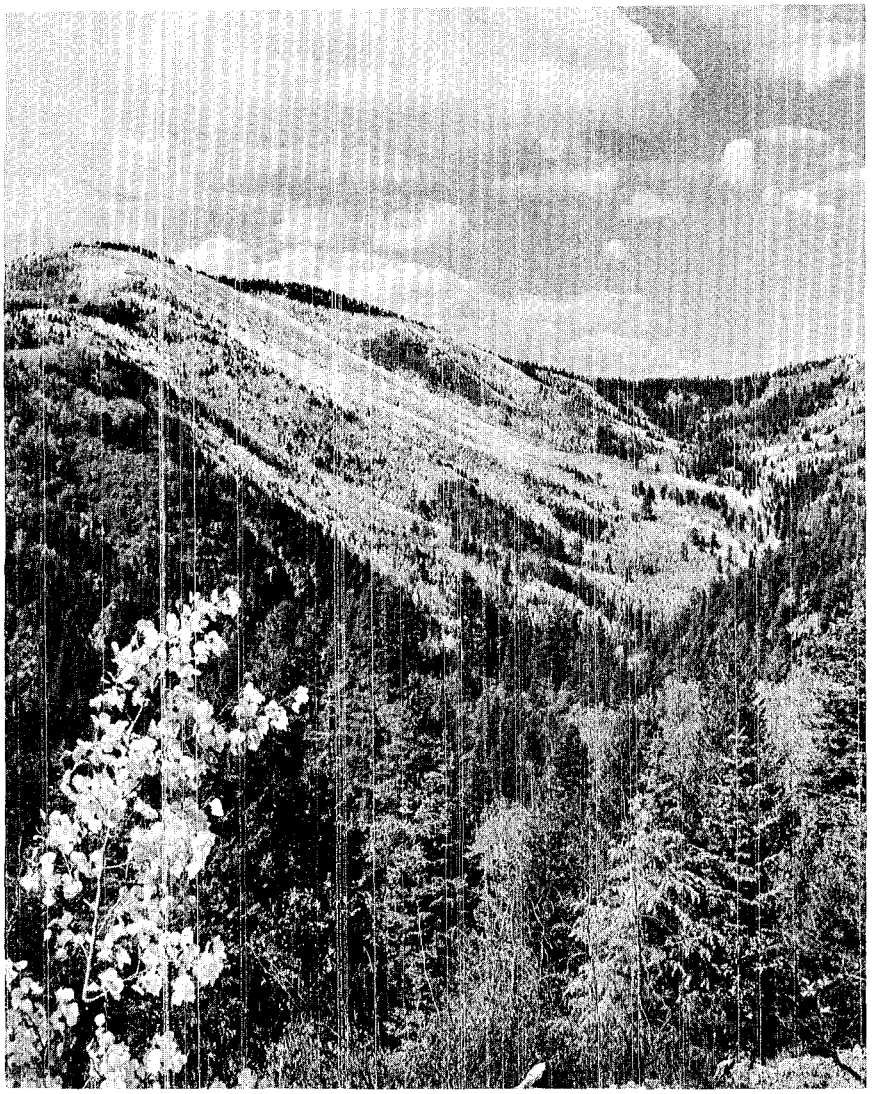
These men were reacting to a superstition that had come over from Europe—the aspen tree bore a curse because the Cross of Calvary had been hewn from aspenwood and a decree of God destined the aspen to quake forever after in fear of retribution.

A profound legend, it still is considered by woodsmen in some parts of northern Europe and the aspen is shunned and even despised. But the American aspen, a relative of the poplar tree, is not a transplant of the European variety and the American aspen quakes for a rather fundamental botanical reason: Aspen leafstalks are slender, flattened and very flexible, allowing the papery thin foliage to respond to the slightest air current.

Even with the curse removed by science, the aspen continued in disfavor in this country for many years and was widely regarded as nothing more than a rather handsome and proliferate weed of the woods. The tall white-barked trees had little economic value, the wood burned poorly and with a rather disagreeable odor and aspen sucklings and shoots were frequent spoilers of otherwise open woodland meadows.

In the late Nineteenth Century it was deduced the aspen had been placed in the forest to play an essential role in natural reforestation. It is the first growth to appear on burnt-over lands. The trees grow rapidly, often to heights of 100 feet, and stabilize mountain slopes until sturdier and slower-growing pines re-establish. Then the aspen groves die out naturally. Foresters also discovered that aspen wood had value in the production of pulp for paper. In the early 1900's a high quality book and magazine paper was produced from aspen pulp.

Harvesting of this Cinderella of the forest increased until World War I but it wasn't until



Great golden draperies lie across the green slopes of the high country during early autumn, when aspen groves are the sign of nature shifting its gears.

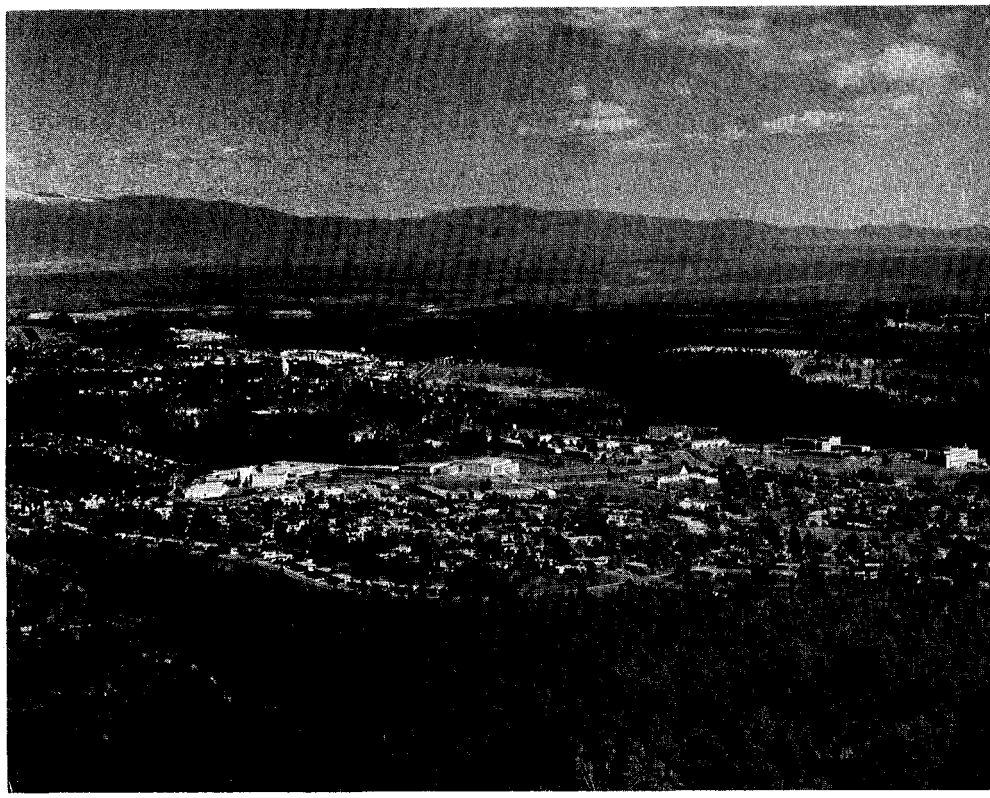
World War II that the aspen became truly important commercially. Now, especially in the Great Lakes region where plentiful moisture and gentler slopes make wood farming a more precise business than it is in the rugged mountain districts of the West, aspen are raised specifically for pulp use. More than one-third of the forested lands in the upper Midwest are occupied by stands of aspen and since 1960 harvests of the white wood in the Great Lakes area have neared the 2,000,000 cords per year level.

In the West, though, and in New Mexico and southern Colorado in particular, the aspen's great service is as an autumn performer. Vacations are planned to coincide with "aspen time" in the Rockies, a period that may begin in late September and rarely lasts more than two weeks. Although it has the widest range of any American tree—from Labrador to the Yukon and south to Kentucky and in mountain ranges into Mexico—great splashes of aspen gold on mountain slopes in the Southwest are what captivate the human eye and spirit.

A stroll through an aspen glen in the fall is an emotional event, like a visit to an immense outdoor cathedral. Shimmering gold spangles supported by countless slender white columns and backed by deepest blue sky are everywhere overhead. The forest floor lies beneath a sequined coverlet of leaves already fallen.

From a distance, aspen season appears first as wee bits of gold dotting only the highest green peaks. With each new day the color extends downward more, like slow-motion spillings of paint from a can. Then, for a few magnificent days, entire mountainsides are a green and gold mosaic.

But the magic is short-lived and one day in mid-October a wind blows strong and the show is over.



TREE A UP

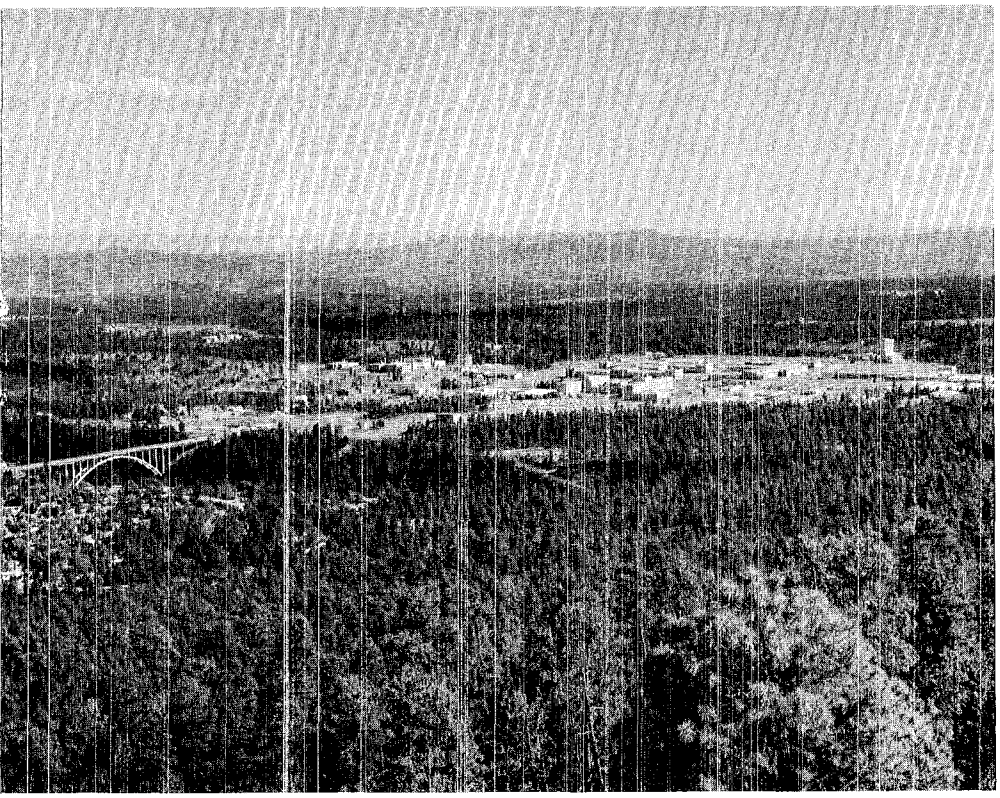
Photographer Bill Jack Rodgers surveys Los Alamos County and a goodly portion of the rest of northern New Mexico from his treetop camera post.

One of the most successful promotional and recruiting aids the Laboratory has used has been the large panorama color photograph of Los Alamos as seen from the Jemez Mountains.

The original panorama was made five years ago by PUB's Bill Regan, from a perch atop a ponderosa pine along the Pipe Line Road. Recently it was decided, because of the many changes that have taken place in both the Laboratory and community in the past few years, to make a new panorama.

Lensman Bill Jack Rodgers found the Regan tree platform had succumbed to the elements and called for help. A Zia crew, led by William Anderson, assembled a fresh platform and braided a long rope ladder for Rodgers to use as his stairway to the stars.

Panorama photography is an exacting and time-consuming bit of business and Rodgers has logged

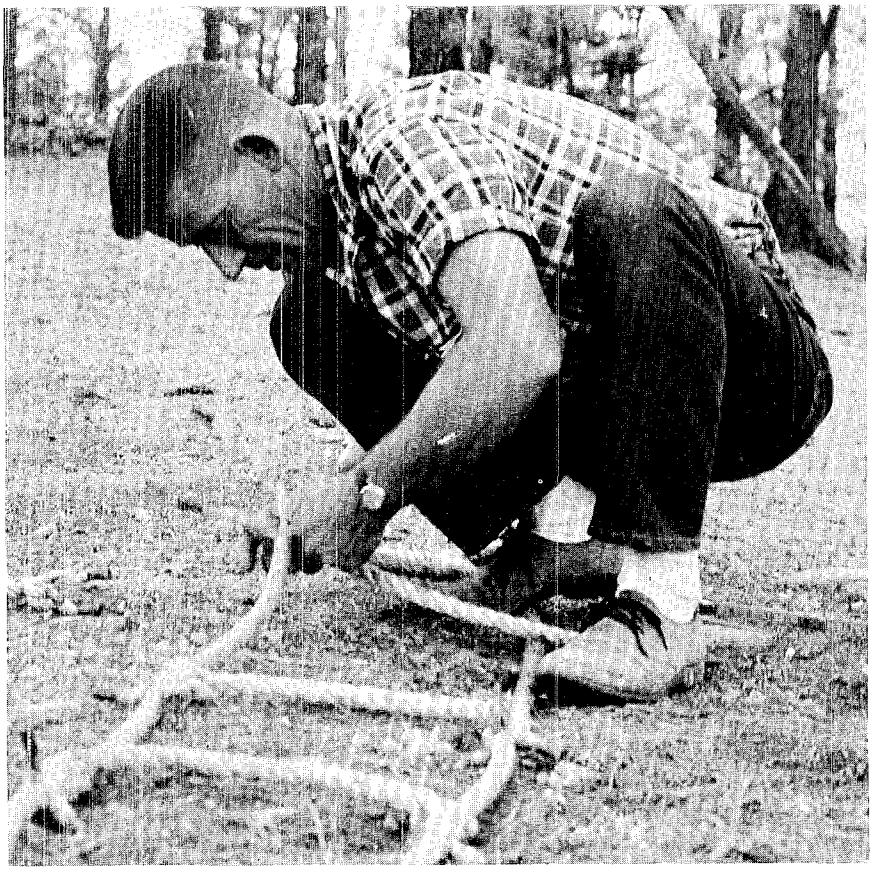


Left: Two of seven pictures in final panorama include Main Technical Area and Los Alamos Mesa portion of community. Santa Fe is in distance, left of center, at base of mountains. Los Alamos Airstrip is at extreme left.

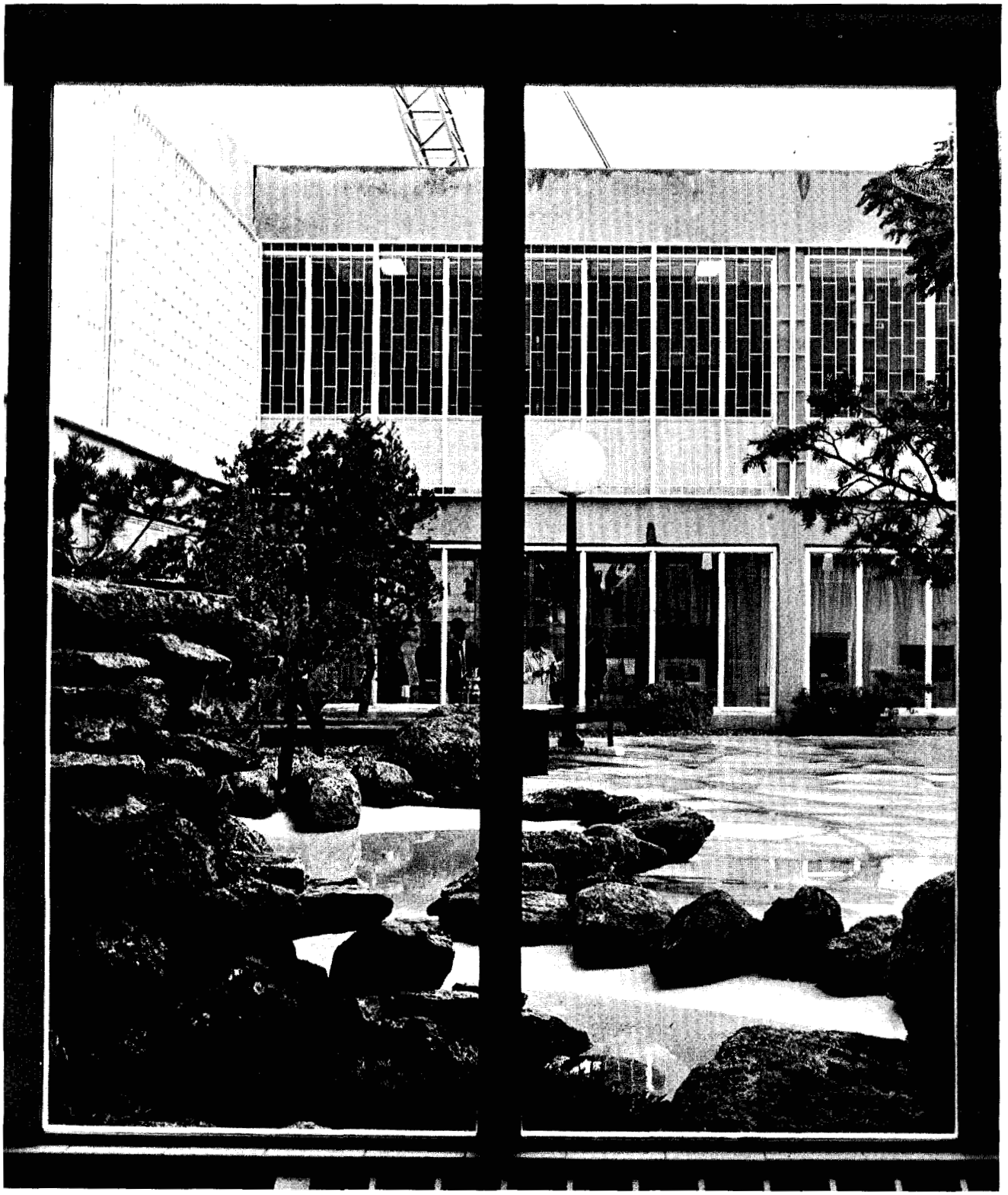
Below: William Anderson of Zia Company braids and knots hemp into sturdy rope ladder for ascending tree.

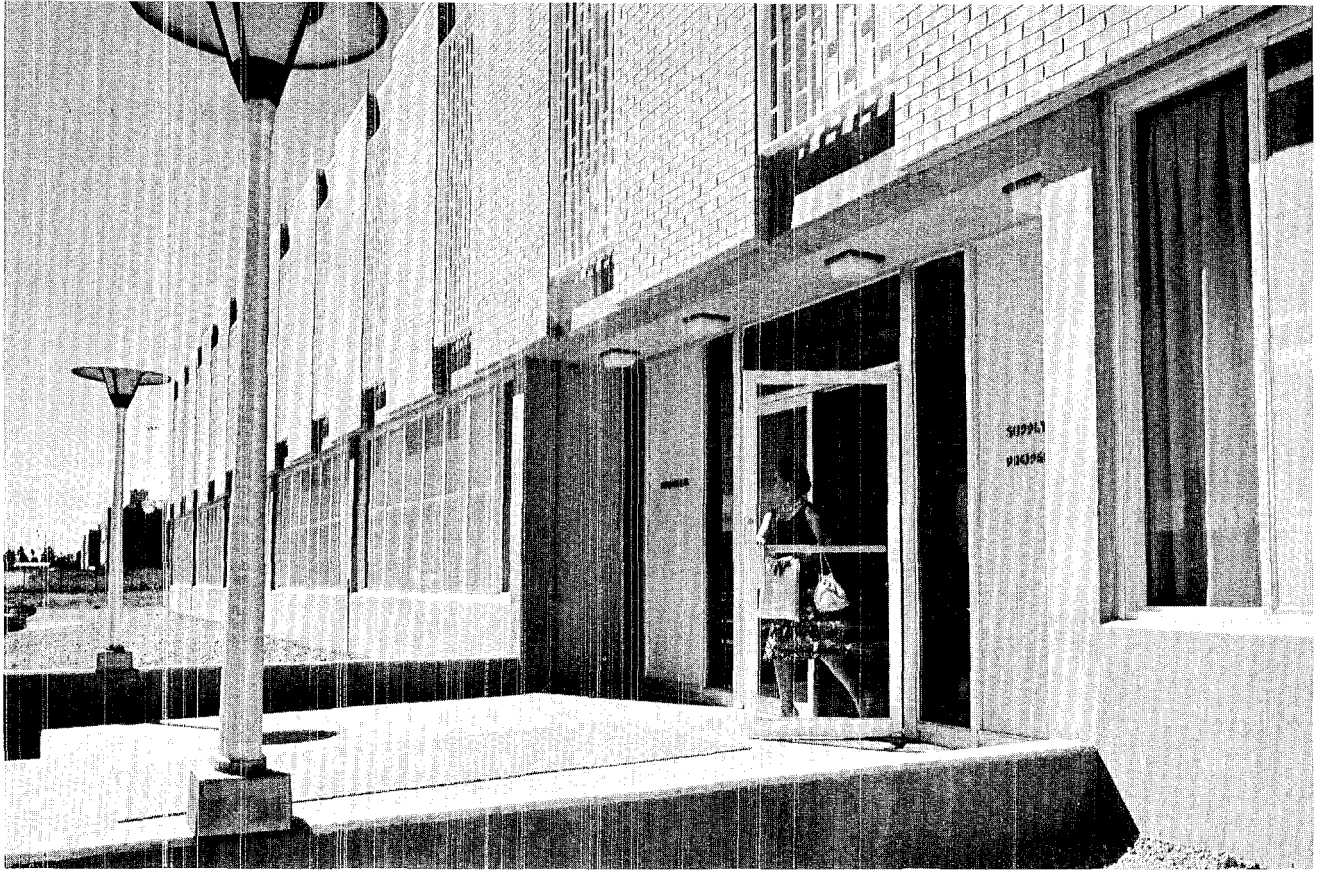
many hours with the birds since the project began in early September. For one thing, the seven pictures needed to give the full sweep of the tech area and community must be made rapidly, before clouds or other conditions change the light intensity and make overlapping difficult. The air must be calm—it doesn't take much of a breeze to start a 60-foot pine tree swaying like a pendulum.

Rodgers is using several types of cameras and is making pictures in color and black and white, in daylight and at night. Cameras are mounted on a heavy tripod with a jeweled bearing and precision azimuth control. Photo processing experts in Graphic Arts will make the final assembly of photos, supplying a single picture that will take in not only Los Alamos but the far mountains extending from Taos almost to Albuquerque.



Looking across flagstoned terrace into LASL's public museum. At left is fountain and pool.





Main entrance to new Personnel and Supply and Property Building. Facing Diamond Drive, the new building features brick and glass exterior, spacious and colorful offices. A passageway links it to the Administration Building.

NEW LOOK

Photos by Bill Jack Rodgers

It isn't really plush, it just looks that way because the Laboratory has never seen anything like it before. That's the best explanation for the new Administration Building annex structures along Diamond Drive.

Occupancy of the new buildings was all but complete in late September when T Division took possession of its new offices. Earlier, Supply and Property, Personnel and the Community Relations Office and Museum relocated from their old quarters in TA-1.

The buildings—there are three, two brick, glass and concrete structures connected by glassed passageways and a carbon copy corrugated addition to the Stretch Computer building—cost some $2,400,000. Architect was the firm of Flatow, Moore, Bryan and Fairburn of Albuquerque. Robert E. McKee Company was general contractor.

Brick exteriors are sharp contrast to the spartan poured concrete features of most Laboratory buildings. The new space is especially different for tenants who moved in from the wartime P

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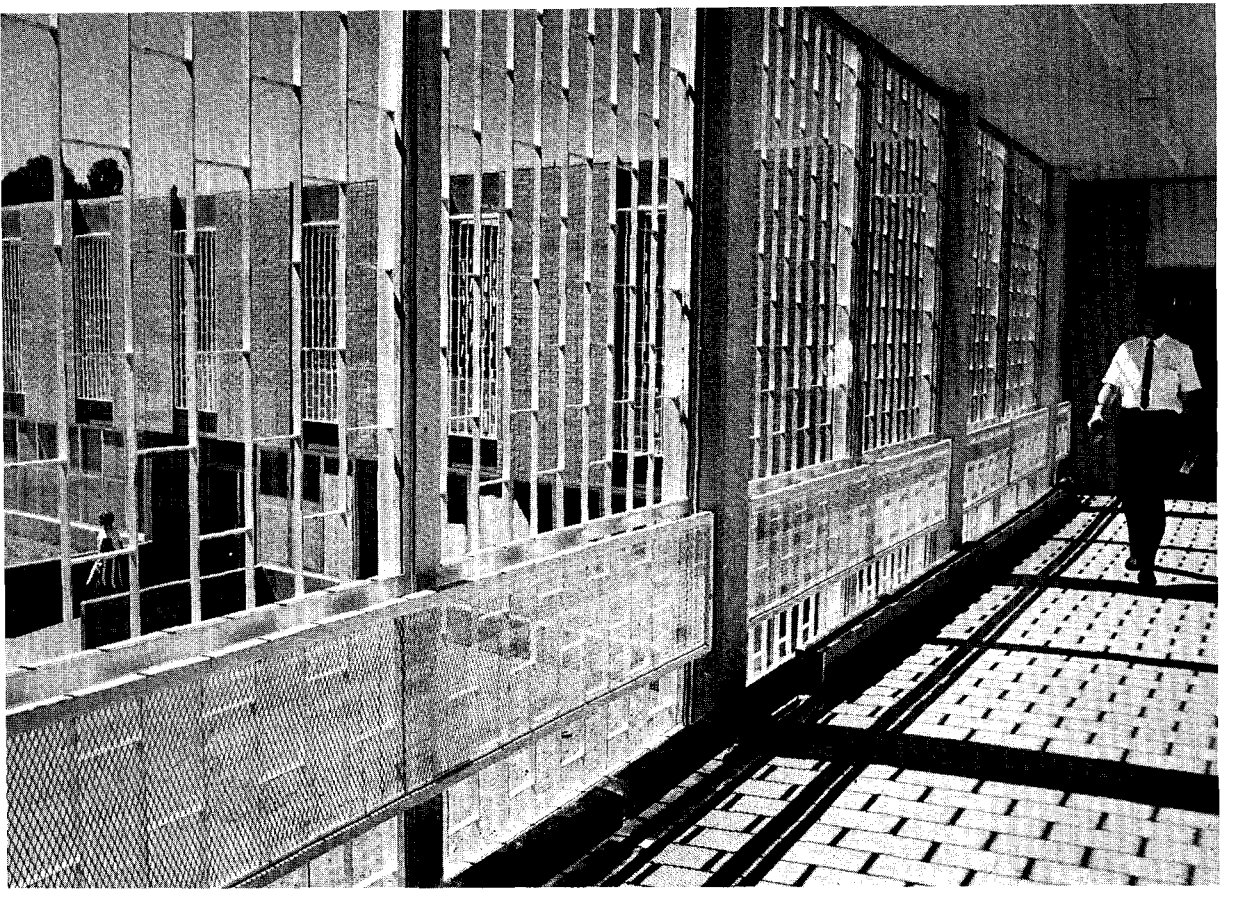


Above: Glass and decorative metal bars form a pattern in the second floor passageway that link new buildings. Separate entry for Community Relations and Museum (visible at left center) simplifies control of visitor traffic.

Below: Housing Manager Barbara Crabtree and Receptionist Mary Pierce in the main lobby of the Personnel Building. Another reception room for Supply and Property Department visitors and vendors is on the second floor.

continued from preceding page

Prime and AP Buildings. Adequate accommodations were something you just dreamed about. Offices are spacious and light with large windows and even draperies on some. Colors, instead of the "government green" so common elsewhere, include old gold, plum, mustard and others. Walls in single offices are often decorated in contrasting colors.

The main lobby of the Personnel Building, the one closest to Diamond Drive, includes a reception desk, rest rooms and drinking fountain. The housing office is just off the lobby. A staircase leads up to Supply and Property on the second floor.

Most spectacular feature of the new buildings is the landscaped patio that has been made a part of the public Science Museum. Entry to the museum is through doors on the southeast corner of the inner building; it is marked by signs on brick walls off the parking lot.

The patio was designed by the Zia Company's Carl Freeman. Freeman and his assistant, Johnny Martinez, supervised the planting of pinon trees and positioning of large lichen-covered rocks that were hoisted over the two-story patio walls by a large crane. The plantings are in a green-hued copper ore gravel that borders flagstone surfacing.

Kiwi "flies!" Crane hoists historic Kiwi A into exhibit position in patio. Cutaway exposes innards of reactor so that control rod animation can be observed by museum visitors.

A pool and fountain are in a corner and several benches have been provided.

A Kiwi A reactor, the pioneer of Project Rover, has been placed on display in the patio. A portion of the pressure vessel wall has been cut away to expose the reactor core. Animation supplied by the Shops Department makes it possible for visitors to push a button and watch the control rods move into "critical" position.

Additional exhibits are planned for the patio.

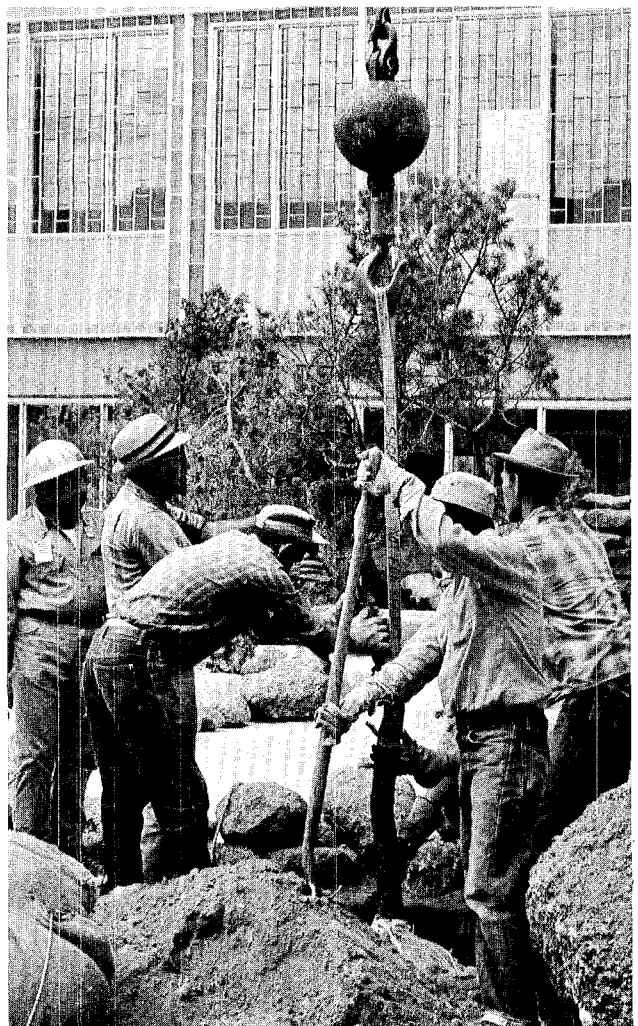
Leading to the patio are doors from the main museum exhibit hall and from a carpeted conference room that will be used by visiting groups.

Upstairs in the SP area, automated filing cabinets make it easier to keep track of the constantly increasing amount of property records. The files are operated by pushing a pre-selected button. This causes a set of file hangars to rotate and deliver only the desired material.

Occupancy of the office space is to be followed next year with installation of new machines in the Stretch Addition.

Access to the new buildings from the Administration Building will be through a new door and passage cut in the east corridor on the main floor. in W Division. The SP-PER building officially is SM-123; the T Division-Com Rel building is SM-200.

Held erect by crane hook, a pinon tree is transplanted by Zia Company crew. Rocks and trees were hauled from nearby mountains to assure natural look in landscaping.



'Monarch of the Meadow'

A Big Year for Sunflowers

BY DUDLEY LYNCH

When it comes to flowers, the choice between a prizewinner and a weed may be purely arbitrary – a preference for a blossom's color, its fragrance, cant or any of a dozen other traits. One man's floral titillations may be another's taboos. But where the category is wild flowers, the common sunflower—big, brassy and bright—is frequently a favorite with all.

This monarch of the meadow, rough-leaved, hairy-stemmed and profusely-flowered, has outdone itself this year in the wooded glens, roadsides and stubble fields around Los Alamos. The stimulant was rain, and lots of it. In response, as high as 8,000-foot altitudes, the sunflower sprouted from every nook and cranny.

Now the season is over. The yellow, ray-like petals, which radiate from the purple-brown, seed-laden discs in the center, are dropping off, leaving erect the dark stalk and its nutritious pod. Though robbed of its spectacular sheen, the sunflower hasn't lost a whit of its succulent appeal to birdlife—and gorge themselves they will!

After the birds have had their fill, the remaining seeds will eventually fall unobserved to the ground to await the start of a new growth cycle next spring.

Elsewhere, however, the sunflower and its utilitarian parts may well follow a different regimen. Beauty aside, the sunflower is a very beneficial plant. This has been known a long, long time, and its commercial aspects are exploited from the plains of Kansas (where the common sunflower is the state floral emblem) to the arcane reaches of Southern Russia.

The flower's utility has induced widespread cultivation—and tinkering with its hereditary innards—in many parts of the world. The Kansas, or prairie, variety may grow 20 feet tall, have flowers a foot wide and be overburdened with nutritious seeds. It is this variety that is profitable commercially from several angles.

America's first white settlers found Indians cultivating sunflowers, notably around Lake Huron. Leaves became winter silage or, on occasion, were smoked by the indiscriminate savages. Fiber meant thread, petals yielded dyes, blossoms brightened ceremonials. Seeds were foodstuffs, and their oil, crudely extracted, was used to cook with and became the red man's equivalent of "greasy kid's stuff."

Even earlier, the Spaniards found the sunflower—many species of which are native to South America —deeply revered by the Incas of Peru, who saw in it the radiance of the sun. They too found the plant a convenient wilderness PX.

Exploding yellow-orange sunflowers are old hat to travelers in the West. Westerners themselves need no more introduction to this roadside fixture than to the saga of

"Summer's sheeny sentinel."

Boot Hill. But what isn't so widely known, even to more knowledgeable amateur naturalists: The sunflower family (*Compositae*) comprises more than 10,000 species.

They aren't all yellow, as is the granddaddy of the *Compositae*, the prairie or common sunflower. They aren't all big, brassy and bright. They grow in crouching clumps and in prodigious singles—and in all sequences between—from seashore to mountain, from the Texas Gulf to the plains of Saskatchewan, as well as in other areas of the globe.

Around Los Alamos the varied offerings include, among others, an ill-smelling bloom aptly tagged the orange sneezeweed; a fragile, exquisitely-purpled mountain aster; the stubby coneflower and some prosaic relatives with soubriquets like rabbitbush, gumweed and the woolly yellowdaisy.

But when all is said and done, it is the common, everyday sunflower and its retinue of yellow-petaled cousins that capture most avidly the fancies of wild flower fans.

These ruddy, round-faced blossooms have inspired paintings by the masters (Vincent Van Gogh's "Sunflowers" and "Sunflowers in Seed"). They have provoked more than one poem, and sparked reams of printed prose. Sunflowers have even held supernumerary roles in a hit play (Marc Connelly's "The Green Pastures").

But the poets not withstanding, sunflowers die an unspectacular death every autumn, usually in September in the mountains as the specter of true fall approaches. And next year, despite its predators, this floral reincarnation of Old Sol reappears — a sheeny sentinel of summer.

The Technical Side

American Physical Society Meeting, Honolulu, Hawaii, September 2-4:

"Kiwi-A, A Rocket Reactor" by Carroll B. Mills, T-DOT.

"One-Dimensional Numerical Calculation of the Reaction Zone of Nitromethane" by Charles L. Mader, GMX-2.

"A New Method for Computing Electrostatic and Pulsed Magnetic Fields" by H. R. Lewis, Jr., P-14.

"Direct Observation of Helmholtz Flow in He II" by T. A. Kitchens, W. A. Steyert, R. D. Taylor, all CMF-9, and P. P. Craig, Brookhaven National Lab.

"Evidence for Quantized Vortices in Liquid Helium" by R. D. Taylor, W. A. Steyert, and T. A. Kitchens, all CMF-9.

"Spectroscopy of Lower Excited States in Co^{59}" by A. G. Blair and D. D. Armstrong, both P-12.

"Satellite-Based Nuclear Test Detection and Radiations in Space at 17 Earth Radii," by R. F. Taschek, P-DO.

"0.2-keV Level-Width Measurement at 21-meV Excitation Energy" by Peter Fessenden, P-12, W. R. Gibbs, T-9, and R. B. Leachman, P-12.

"The Emission of Energetic He^6-Particles from Ci^{252}" by S. L. Whetstone, Jr., and T. D. Thomas, Jr., both P-9.

"Computer Calculation of Shock Interactions" by Richard A. Gentry, T-3. (INVITED PAPER)

"Ionization Produced by Energetic Germanium Atoms within a Germanium Lattice" by A. R. Sattler, Sandia Corp. and John M. Palms, P-DOR.

Advanced Institute, Radiation Trapped in the Earth's Magnetic Field, Bergen, Norway, August 16-27:

"Vela Satellite Measurements" by James H. Coon, P-4.

Presentation before New Mexico Chamber of Commerce, Espanola, August 19:

"A Proposed Accelerator for Basic Research in Nuclear Physics" by Louis Rosen, MP-DO.

VII International Conference on Phenomena in Ionized Gases, Belgrade, Yugoslavia, August 22-27:

"Line Shape Measurements on Electron Cyclotron Harmonics Emitted by a Laboratory Plasma" by Harry Dreicer, P-14.

Presentation at (1) University College, London, August 27; (2) IAEA Symposium, Vienna, September 6; (3) Institute for Radiochemistry, Karlsruhe September 8; (4) Institute for Inorganic Chemistry, University of Bonn, September 10:

"Fluoride Stabilization of Actinides in High Valence States" by R. A. Penneman, L. B. Asprey and F. H. Kruse, all CMF-4.

Fifth Rare Earth Conference, Ames, Iowa, August 30-September 1:

"Results of Augmented Plane Wave Calculations of the Band Structure of Cerium Metal" by James T. Waber, CMF-5, and A. C. Switendick, Sandia Corp.

"Kinetic Studies on Extraction of Europium by Lithium Amalgam and Comparison to Removal by Electrolysis" by E. I. Onstott, CMB-8 and John F. Goddard, Northwestern University.

"Effects of Rare Earth Additions on the Electrical Conductivity of Cerium at Low Temperatures" by F. W. Clinard, Jr., R. O. Elliott, and W. N. Miner, all CMF-5.

"Preparation of the Carbonates of the Rare Earths from Some of Their Organic Acid Salts" by E. L. Head, CMF-2.

Seminar at University of Amsterdam, The Netherlands, September 3-4:

"The Effects of Oligomycin on Intact Cells" by C. T. Gregg, H-4.

Ninth International Conference on the Biochemistry of Lipids, Noordwijk, The Netherlands, September 5-10:

"Phosphate Incorporation into Phopholipids by Synchronously Dividing Mammalian Cells" by C. T. Gregg, H-4.

First International Conference on Thermal Analysis, Aberdeen, Scotland, September 6-9:

"Versatile High Temperature Thermal Analysis Apparatus" by George N. Rupert, CMB-3.

International Conference on Polarization Phenomena of Nucleons, Karlsruhe, Germany, September 6-10:

"Design of a Source of Negative Polarized Hydrogen Ions Using Charge Exchange in Cesium and Argon" by Joseph L. McKibben and George P. Lawrence, both P-9.

"A Scattering Experiment of 23 MeV Polarized Neutrons from a Polarized Proton Target" by P. J. Bendt, CMF-9; J. J. Malanify, P-DOR; T. R. Roberts, CMF-9; and J. E. Simmons, P-DOR.

Second Conference on Plasma Physics and Controlled Nuclear Fusion Research, Culham Lab., Abingdon, England, September 6-10:

"Stability, Heating and End Loss of a 3.5-Megajoule Theta Pinch (Scylla IV)" by W. E. Quinn, E. M. Little, F. L. Ribe, and G. A. Sawyer, all P-15.

"The Fast Plasma From a Coaxial Gun" by John Marshall and I. Henins, both P-17.

"Recent Developments in the Transverse Injection Experiment" by J. E. Hammel and D. A. Baker, both P-17.

"A New Method for Computing Electrostatic and Pulsed Magnetic Fields" by H. R. Lewis, Jr., P-14 and K. R. Crandall, T-1.

"High Density Deuterium Plasma" by J. W. Mather, P-14.

"Pulsed High Density Plasmas for Power Producing Thermonuclear Reactions" by James L. Tuck, P-DO.

Seventh Fluid Dynamics Symposium on Advanced Problems and Methods in Fluid Mechanics, Jurata, Poland, September 1-7:

"A Numerical Method Applied to the Time Dependent Navier Stokes Equations" by Jacob E. Fromm, T-3.

"Solutions to Nonlinear Incompressible Flow Problems Through A Finite Difference Method" by Jacob E. Fromm, T-3.

XXIII International Congress of Physiological Sciences, Toyko, Japan, September 1-9:

"Changes in a Mouse Population Resulting from a Single Dose of X-Irradiation of Each Male Progenitor for as Many as 31 Generations" by J. R. Chaffee and J. C. Hensley, both H-4, E. A. Hyatt, H-5, and W. H. Langham, H-4.

Symposium on the Inelastic Scattering of Neutrons by Condensed Systems, Upton, N.Y., September 20-22:

"Charged Bond Correction to the Dispersion Curves of Diamond" by John L. Warren, P-2.

First International Conference on Thermionic Electrical Power Generation, London, England, September 20-24:

"Spectroscopic Observations of the Low Temperature Arc Mode Operation of a Thermionic Diode" by Walter H. Reichelt, N-5.

"Status Report on Theory and Experiments on Heat Pipes at Los Alamos" by T. P. Cotter, J. Deverall, G. F. Erickson, G. M. Grover, E. S. Keddy, J. E. Kemme and E. W. Salmi, all N-5.

Megagauss Conference, sponsored by the Italian Physical Society, Frascati, Italy, September 21-23:

"Survey of the Los Alamos Flux Compression Program" by C. M. Fowler, R. S. Caird, W. B. Garn, and D. B. Thompson, all GMX-6.

"A Cylindrical Explosive Flux-Compression System" by R. S. Caird, W. B. Garn, D. B. Thomson, and C. M. Fowler, all GMX-6.

Zeeman Centennial Conference (Dutch Physical Society and IUPAP), Amsterdam, The Netherlands, September 6-11:

"The Zeeman Effect in Germanium" by Robert D. Cowan, T-DOT; Athos Giacchetti and Kenneth L. Andrew, both Purdue Univ.

"Zeeman Spectra in Megagauss Fields" by C. M. Fowler, GMX-6.

Tennessee Valley Industrial Health Conference, Gatlinburg, Tenn., September 30-October 1:

"Iodine Sampling with Activated Charcoal and Charcoal-Impregnated Filter Paper" by Harry J. Ettinger, N-5 and Jerome E. Dummer, Jr., H-1.

Fourth National Meeting of the Society of Applied Spectroscopy, Denver, Colo., August 30-September 3:

"Applications of Time-Resolved Spectroscopy to Spectrochemical Analysis" by Harold M. Burnett, CMB-1.

"Present Status of the Description and Analysis of the Optical Spectra of Uranium" by David W. Steinhaus, CMB-1.

"The Role of Spectroscopy in Analysis of Nuclear Age Materials" by Charles F. Metz and Glenn R. Waterbury, both CMB-1.

"A New 4 Pi Gamma Detector for the Precise Determination of Uranium-235 in Reactor Fuel Elements" by George M. Matlack and Charles F. Metz, both CMB-1.

"Time-Resolved Spectroscopy of Air Fluorenscence Produced by High Altitude Nuclear Explosions" by Sidney N. Stone, Herman Hoerlin, and Donald R. Westervelt, all J-10.

"Time-Resolved Spectroscopy in the Far-Vacuum Ultraviolet (100-500A), by K. S. Thomas, N. J. Peacock and G. A. Sawyer, all P-15.

Symposium on Nuclear Materials Management, IAEA, Vienna, Austria, August 30-September 3:

"Methods for the Determination of Plutonium in Spent Reactor Fuels, Plutonium Metal, Alloys and Compounds" by Charles F. Metz and Glenn R. Waterbury, both CMB-1.

V International Conference on High Energy Accelerators sponsored by IUPAP and CNEN, Frascati, Italy, September 9-16:

"High Energy Proton Linear Accelerators" by Darragh E. Nagle, P-11.

150th National Meeting of the American Chemical Society, Atlantic City, N.J., September 12-17:

"Vibrational Spectroscopy: A Structural Tool in Inorganic Chemistry" by Llewellyn H. Jones, CMF-4.

"Kinetic Studies of Hydroxyl Radicals in Shock Waves. V. Recombination via the $H + O_2 + M \rightarrow HO_2 + M$ Reaction in Lean Hydrogen-Oxygen Mixtures" by Richard W. Getzinger and Garry L. Schott, both GMX-7.

"The Energy Metabolism of Synchronously-Dividing Mammalian Cells" by William D. Currie and Charles T. Gregg, both H-4.

"Processing of Plutonium by Ion Exchange- VI. Plutonium (IV) Sorption Kinetics on Dowex 1x4 From Nitrate Solutions" by Dean B. James, CMB-11.

Seventh International Congress on High-Speed Photography, Zurich, Switzerland, September 12-18:

"Quantitative Reduction of Data from High-Speed Stereoscopic Photographs" by John W. Taylor, GMX-6, and Darrell S. Hughes, Univ. of Texas.

Symposium on Environmental Physiology, sponsored by the Federation of American Societies for Experimental Biology, Kyoto, Japan, September 13-17:

"Studies on the Cellular Biochemistry and Organ Size of Cold and Heat Acclimated Monkeys" by R. R. J. Chaffee, H-4; and S. M. Horvath, R. E. Smith, and R. S. Welsh, all non-Laboratory connected.

Seminar at the Free University of Berlin, West Germany, September 14-15:

"The Energy Metabolism of Cultured Mammalian Cells" by C. T. Gregg, H-4.

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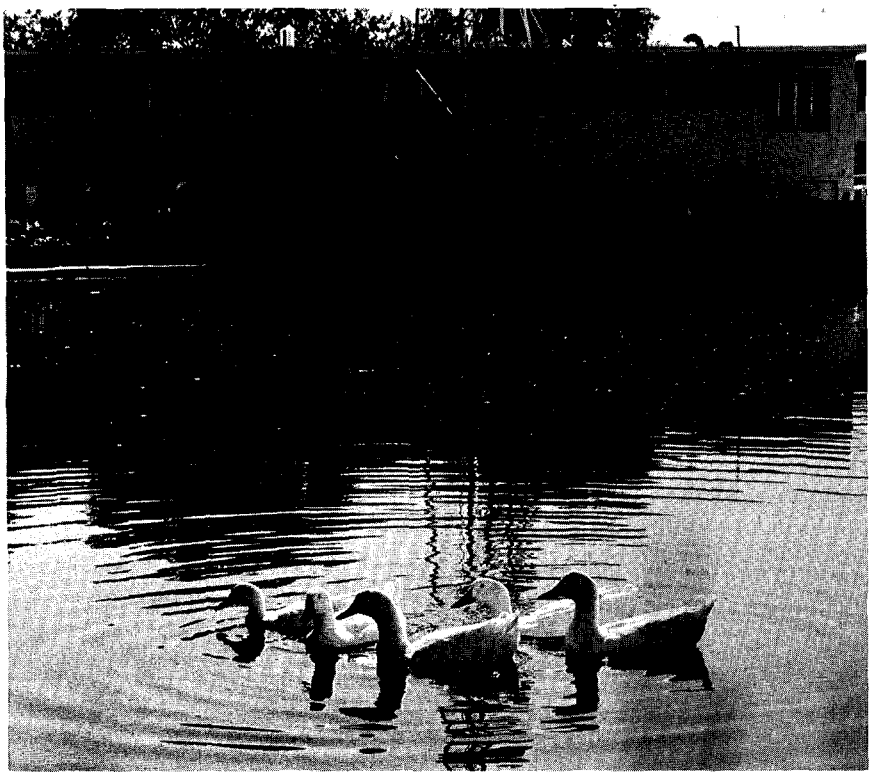


The appearance of five ducks on Ashley Pond poses somewhat of a mystery to county officials, who earlier authorized the lodgment of a dozen of the downy creatures on the Los Alamos waterway. But *these aren't those*, says Bob Hughey of the county staff. Apparently, he surmises, some munificent individual noted the publicity on a request from the Izaak Walton League (which was approved with stipulations) and provided five ducks on his own. With winter coming, the question of responsibility for the fowl has been bandied about and so far the county has ducked responsibility for the ducks.

Tech. Side . . .

continued from preceding page

"Plasma Compression by Explosively Produced Magnetic Fields" by D. B. Thomson, R. S. Caird, W. B. Garn and C. M. Fowler, all GMX-6.

Symposium on Numerical Methods *in Subsonic Fluid Dynamics*, Teddington, Middlesex, England, September 27-29:

"Navier Stokes Equations: Unsteady Flow" by Jacob E. Fromm, T-3.

International Colloquium on Semi-Metallic Derivatives (Faculty of Science of Paris), Paris, France, September 27-October 2:

"*Phase Relationships of the High* Carbon Portion of Selected Lanthanide Dicarbides" by N. H. Krikorian, T. C. Wallace, and M. G. Bowman, all CMB-3.

Third International Symposium on Fluorine Chemistry, Munich, Germany, August 30-September 2:

"Fluoride Complexes of Heavy Actinides in High Valence States" by R. A. Penneman, L. B. Asprey and F. H. Kruse, all CMF-4.

New Hires

Lloyd Philip Reinig, Richland, Wash., ENG-DO

Ronald Eugene Brodd, Charleston, S.C., K-4

Richard Lee Morse, La Jolla, Calif., P-16

Leonard Don Gehre, Los Alamos, J-12 (Rehire-Casual)

Bennie Ray Breed, Houston, Texas, GMX-11

Marlice D. Helland, Los Alamos, PER-2

Charles Maurice Hennigh, Espanola, N.M., CMB-AS

Faustin Chavez, Santa Fe, N.M., SP-3 (Short Term)

John David Klein, Evansville, Ind., M & R

Doris H. Dunning, Los Alamos, K-4 (Rehire)

Rose A. Hill, Santa Fe, N.M., SP-DO (Casual)

Sandra Marie Kennedy, Houston, Texas, T-1

Margaret M. Coleman, Los Alamos, CMB-6 (Rehire)

Marian E. Fox, Los Alamos, PER-2

Charles D. Hollingsworth, Los Alamos, SP-3 (Short Term)

Ruth Mildred Bombardt, Los Alamos, N-1

Posey Washington Keaton, Jr., Baltimore, Md., P-DOR

Robert F. Gribble, Austin, Texas, P-15

Warren Lawson Sullivan, Denver, Colo., ENG-2

Carl Walske, Seattle, Wash., T-DOT (Rehire)

Carolyn Sue MacDougall, Santa Fe, N.M., CMB-1

Rosemary Vivian Chapman, Los Alamos, PER-3

Rolland Jack Blackburn, St. Louis, Mo., CMB-7 (Rehire)

Claricea L. Cox, Los Alamos, T-12 (Rehire-Part Time)

Norris Edward DeLucero, Santa Fe, ENG-2

Radiation Source 'Lost' at NTS Had Been Hauled to Farmington

A two months search that had all the elements of a suspense movie ended September 13 when a radiation source missing from the Nevada Test Site was located in a storage yard at Farmington, in extreme northwest New Mexico.

The radiation source, used in industrial surveys of holes drilled for testing programs, is the property of Welex Division of the Halliburton Company, a drilling contractor at NTS.

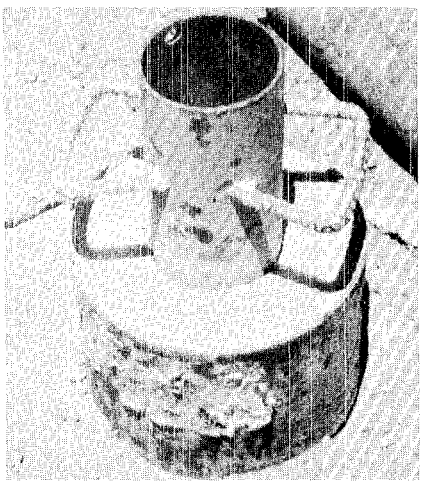
The search began in mid-July after the source and its heavy lead protective case apparently bounced from a truck on a rough, remote test site road. When the loss was discovered an intensive search was made in the forward areas of the test site. The heavy lead protective case was found in a storage area just off the road, but the source was missing.

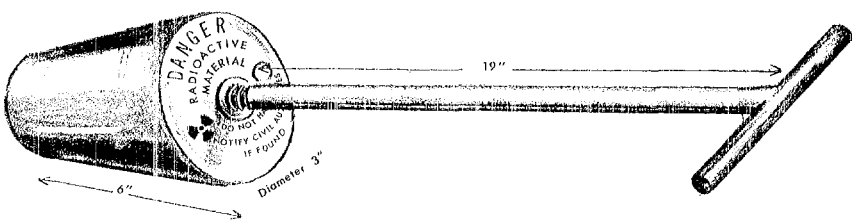
AEC investigators traced and checked everyone known to have traveled the road between the loss of the source and the finding of the protective case. Widespread publicity was given to the loss since the radiation source would be hazardous to any person close to it for a considerable period of time, although not hazardous to anyone simply walking by it or otherwise exposed for a brief period.

The investigation finally turned up a truck driver who had taken a load of drilling equipment from the test site to the drilling company's storage yard in Farmington. He had been away and had not heard of the missing radiation source.

When questioned, the driver recalled finding the heavy lead case and the source blocking his passage on a test site road. He thought the heavy lead "pig" was a counterbalance used on a drill derrick, so left it at a nearby storage area. He had not noticed a radiation danger tag on the source, a metal cylinder approximately six inches long and three inches in diameter, with a T-shaped metal rod 19 inches long attached on one end, and he could not find the source when he unloaded the lead pig at the test site storage yard. The source had slipped under other equipment, and he unloaded it at Farmington.

A company spokesman told the AEC that the storage yard where the source was located has been little used since 1964. He said no one had been in the yard for more than a short period during the past few months. From this, it was concluded to be unlikely that anyone received a measurable radiation.





WHAT'S DOING

CONCERT: "Autumn Leaves" concert by Maria Sophia Zeigner, soprano; Paul V. Muench, pianist. Saturday October 9, 8 p.m., Civic Auditorium. Admission, $2. All proceeds to charity.

EXHIBITIONS: Museum of New Mexico, Santa Fe, buildings open 9 a.m. to 5 p.m. Monday through Saturday; 2 p.m. to 5 p.m. Sundays and holidays.

Fine Arts Building—Indian Arts Fund Collection, opens October 3; Watercolors of Santa Fe, closes October 24; Paintings by Loyce Easley, closes October 31; Leon Gaspard: A Retrospective Exhibition, closes October 31.

Museum of International Folk Art—The Shape of Music, all month; Five Continents, Gifts and Purchases, all month; Gyotaku: Japanese Fish Prints, closes October 24.

PUBLIC SWIMMING: Los Alamos High School Pool. Adults 35 cents, children 15 cents. Saturday and Sunday, 2 to 6 p.m. Monday, Tuesday and Wednesday, 7 to 9 p.m.

OUTDOOR ASSOCIATION: No charge; open to the public. Contact leader for information regarding specific hikes.

Sunday, October 10, Black Mesa hike. Cottonwoods in the Valley will be in full color. Betty Hansbury, leader.

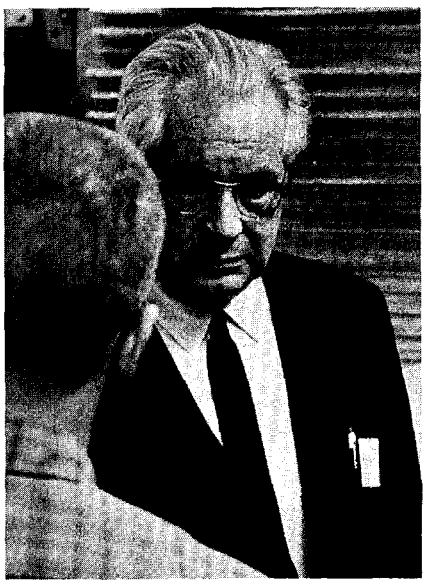
Sunday, October 17, In Bandelier, to Stone Lions, down Hondo and return up Frijoles Canyon. Ken Ewing leader.

Saturday, October 30, Rim of lower Alamo Canyon to the Rio Grande and return. Liz Gittings, leader.

Saturday, November 6, Apache Springs to Beaver Pond and on to Upper Crossing. Bob Skaggs, leader.

DEATH TAKES THE VOICE OF TRINITY

The scientist who manned the microphone during the Trinity test countdown—Dr. Samuel King Allison—died September 15 following heart surgery in Oxford, England.



Allison last visited Los Alamos in July to study Project Sherwood progress.

At his death, Allison, 64, was director of the Enrico Fermi Institute for Nuclear Studies at the University of Chicago. At Los Alamos he is remembered by veterans of the wartime bomb project as a vital assistant to Dr. Robert Oppenheimer.

Allison played a salient role in the Trinity test drama when, at 20 minutes of zero on July 16, 1945, he took over the microphone to deliver the countdown for the world's first atomic explosion.

At S-10,000, the observation post due south of the bomb tower, Allison announced the timing over a public-address system and an FM radio. At the last crucial second, he cried, "Now," and an incredibly brilliant and suffusing light signaled the arrival of a new age.

But long before Trinity, Allison's voice was heard in the councils of atomic affairs.

The Chicago-born scientist, who first taught physics at the University of California in 1926, was intimately connected with U.S. nuclear studies from the first. When the cryptically-named S-1 section was organized in September, 1941, to co-ordinate the scientific development of nuclear fission into a weapon, Allison was a member.

The physicist was present at the first self-sustaining chain reaction in Chicago on December 2, 1942, and in 1943, was named director of the Metallurgical Laboratory by Arthur Compton, whom Allison replaced.

Allison came to Los Alamos in late 1944. In December, he took charge of a new advisory body, the Technical and Scheduling Conference, which directed the scheduling of experiments, facilities and materials. "In January and February, 1945," says the official AEC history, "it was the nerve center of Los Alamos."

The newcomer from Chicago, who lent Project Y a fresh, detached viewpoint, also was named to head the Cowpuncher Committee, to which was assigned over-all direction of the implosion method, and "rode herd" in the last, hectic months over the mélange of nettlesome problems that arose.

Allison left Los Alamos in 1946, but remained a consultant until 1956. He was last here in July of this year as a member of the Sherwood Evaluation Committee.

At his death, he was in England to attend the International Conference on Thermonuclear Programs at Culham as an official observer of the AEC.

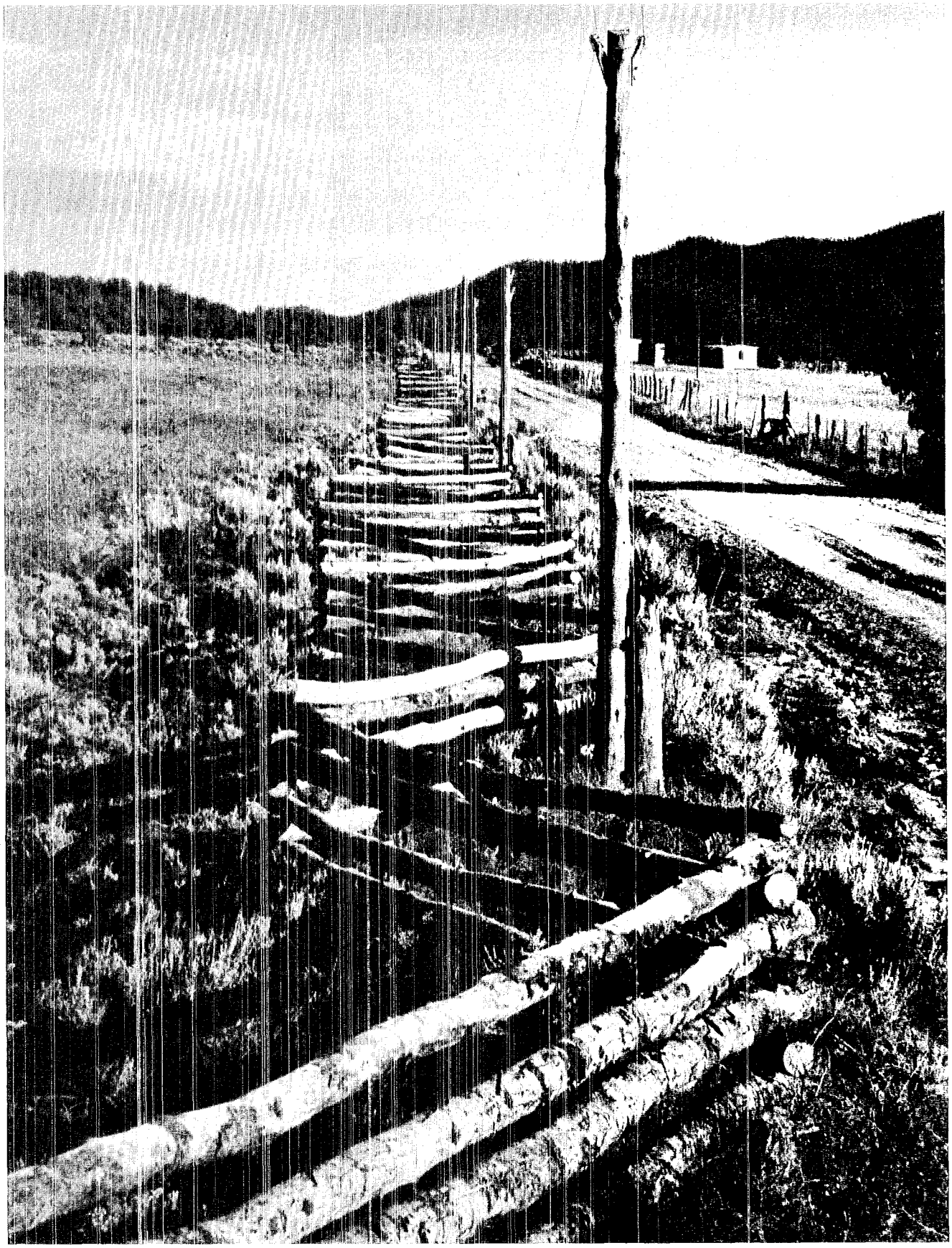
TRESPASSERS ON DIAMOND DRIVE TOLD OF CONSTRUCTION DANGERS

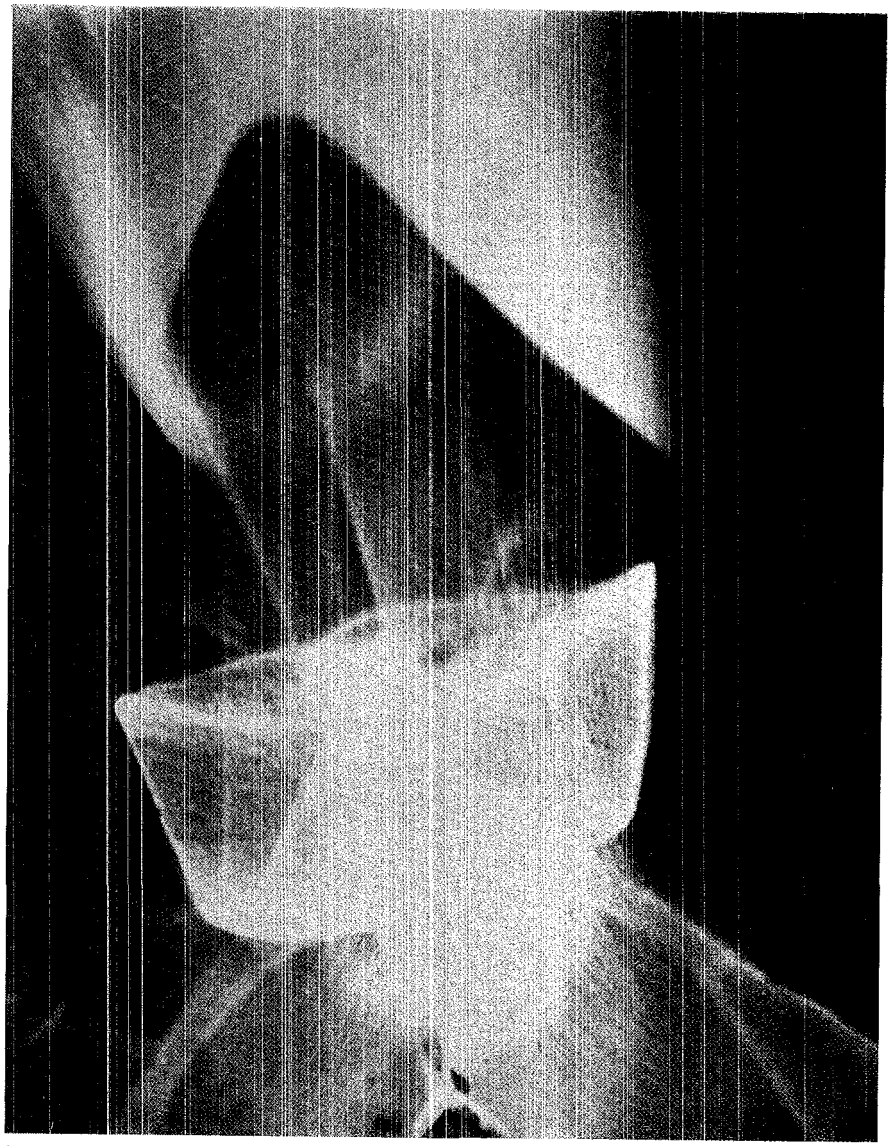
Children violating the safe pedestrian path around the Diamond Drive construction project near the Baptist Church have been responsible for a number of near-tragedies involving heavy equipment, AEC Safety Engineer E. G. McAndrew reported.

McAndrew voiced a plea that parents impress upon youngsters the lethal hazard that exists around moving equipment. Operators are usually too busy keeping track of their work to look out for unexpected trespassers.

McAndrews said the problem is greatest during the time just before and after school. He said police are going to be on duty during the school "rush" hours, both to warn children against leaving the safety path and to keep a lookout for motorists attempting to sneak through the construction work.

Opposite: Worm fences made of aspen logs may not last very long, but they are cheap, practical and picturesque, as well as being reminiscent of the days before barbed wire, when every back country homestead kept the livestock in (or out) by this means. This zig-zag fence parallels State Route 111 near Canyon Plaza, in Rio Arriba county. Photo by John Young.





Photographic interpretation by William Thonson

Post-doctoral appointments
at Los Alamos are available
for young scientists
and engineers.
Elementary particle research,
plasma physics, space physics,
molecular and cellular biology,
and cryogenics are among
the areas of opportunity.

Qualified applicants interested in research at Los Alamos are invited to send resumes to: Director of Personnel, Division 65-103

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